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BUY ALBERTA MADE PRODUCTS

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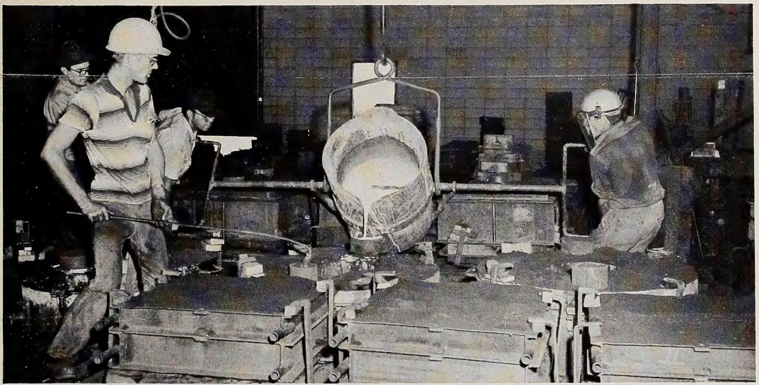
Alberta INDUSTRIAL NEWSLETTER

- MOULDED PLASTIC
- ALUMINUM EXTRUSIONS
- METAL FURNITURE
- PEAT MOSS

DEPARTMENT OF INDUSTRY AND DEVELOPMENT / Hon. A. R. PATRICK, Minister
INDUSTRIAL DEVELOPMENT BRANCH / R. MARTLAND, Director

VOL. 7, No. 4 EDMONTON, ALBERTA, CANADA SEPTEMBER 1963

New Iron Foundry Locates in Calgary



Molten iron in the process of becoming cast iron again on the continuous production line. The sand moulds are moved on rollers from the moulding machines past the casting area and on to the finishing area where the castings are removed from their moulds for final cleanup and dressing.

A revolutionary mould core baking procedure employing infra-red light is part of the mould making process at Sovereign Castings Ltd., of 50 Avenue and 5 Street S.E., Calgary. The company's mailing address is Box 122 Station "A", Calgary. This new iron and non ferrous metal foundry was founded in May 1963 by owners Glyn Harris and L. F. Knight and production started on June 18. The new core baking process was developed by the company to save on the capital investment required for the usual baking oven. It is proving very successful.

The company decided to locate its foundry in Calgary because it was the only city of its size with no gray iron foundry.

The foundry does general jobbing and also produces municipal castings, waterworks fittings, and alloyed iron and non-ferrous items. Many standard types of pipe fittings are kept in stock and the company is now also diversifying into production of gears, sprockets, sheaves and farm implement parts. Many of these items are produced for large implement and equipment distributors who formerly imported them from the United States but now find it cheaper and faster to buy them locally. The company's market area covers both Alberta and British Columbia, but its most important market at present is the Calgary area. The firm expects to gross about $250,000 in the first year of operations.

The factory is housed in a new 6,400 square foot, $80,000 concrete block building which is being purchased on a lease-back arrangement, and contains $30,000 worth of equipment.

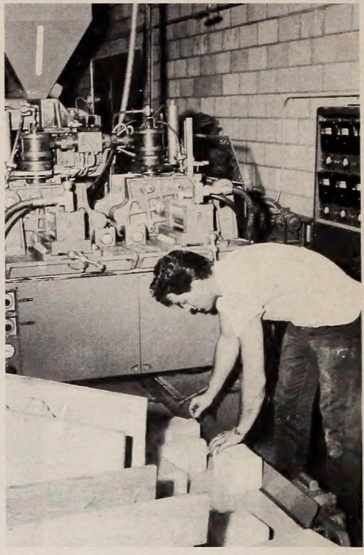
Scrap iron from western Canada is the main raw material; coke is brought from Ironton, Ohio, and the foundry moulding sand comes from Lake Winnipeg. The company has 14 employees at present, and its annual payroll costs are estimated at $80,000.

BLOW MOULDED PLASTIC TAKES MANY SHAPES

Bottles, containers and toys are among the plastic products manufactured by Marpak Industries Ltd. of 12105 - 120 Avenue, Edmonton. Since its establishment in January 1962, by company president, Jack Soifer, Marpak's products have been finding wide acceptance. Its plastic bottles in a variety of sizes are used by Alberta manufacturers for packaging substances from edible oils to household bleaches. A wide range of toys and notions are also produced for sale to distributors, wholesalers and retail stores. Besides custom items, Marpak also produces standard lines of bottles for oil industry mud samples, hospital, and other uses.

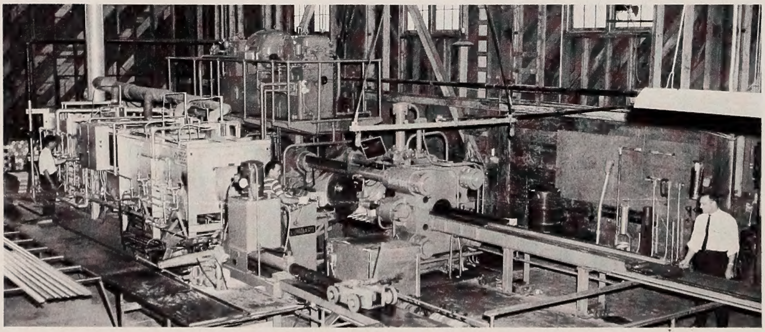
Heart of the plant is two blow moulding machines which force measured amounts of molten polythene into special moulds. As many as eight items can be blown simultaneously on the machines, depending on the size required. Basic raw material for the process is polythene chips supplied by Du Pont of Canada Ltd., Dow Chemical Ltd., and Canadian Industries Ltd. Auxiliary equipment includes mixers, grinders, compounders and a flame treater which oxidizes the smooth surface of the bottles as they come from the mould, enabling gummed labels to be affixed. Total value of machinery and equipment is $78,000.

The company leases 3,200 square feet of factory space in a concrete block building and also leases 4,000 square feet of warehouse space. With a staff of six and an annual payroll of $21,000, Marpak Industries Ltd. anticipate annual sales of over $275,000 in 1963, and claim the distinction of being Alberta's first manufacturer of plastic toys on a mass production basis.



Freshly blown polythene bottles drop two at a time from the blow moulding machines onto the moving belt which passes them along to the flame treater prior to labelling.

$300,000 Plant Extrudes Aluminum



The cylindrical aluminum billets on the extreme left of the picture first pass through the preheater on the left where they are heated to 800 degrees F. before passing through the 1,000 ton press on the right from which they are extruded into the desired shape.

Custom Aire Aluminum Ltd. of 3606 Bonnybrook Road, Calgary, is Alberta's first aluminum extrusion plant, with 20,000 square feet of leased factory space and almost $300,000 worth of equipment. The firm expect sales to reach about $400,000 this year. The company head office is in Toronto, with a branch plant in Montreal. Production commenced in Alberta in April 1963.

The plant will primarily be supplying extruded shapes to manufacturers of aluminum windows and doors and will also be producing standard shapes such as bars, rods, angles, channels, and tubing, to be distributed through normal warehousing channels. In addition, a number of specialized items such as trailer trim and boat trim may be sold directly to manufacturers.

The basic raw material is received in the form of billets from Aluminum Company of Canada Ltd. The Billets are passed through a preheater which heats them to 800 degrees Fahrenheit, before being placed in the 1,000 ton horizontal press. The press exerts a pressure of 150,000 pounds per square inch at the face of the specially shaped die through which the aluminum is forced to obtain the various shapes required.

The newly formed extrusions are transferred to cooling racks before handling in an hydraulic stretcher to ensure straightness, and are then cut to the required length.

A staff of six is expected to increase to 12 by the end of the year, bringing the annual payroll to over $28,000.

UNUSUAL BOAT FINDS WIDE ACCEPTANCE

A completed fiberglass boat coming off the production line where the finishing touches are being added to several more in the background.

A business that started in a home basement as a hobby seven years ago has grown to a $65,000 operation with an exclusive Canada wide franchise for a new type of fiberglass boat.

John Booth and Sons Ltd. of 11825-145 Street, Edmonton are the sole Canadian manufacturers of the "Power Cat" line of fiberglass boats, including the new tri-hull type of catamaran which is proving exceedingly popular on both sides of the border because of its roominess and safety.

The tri-hull is the firm's main production model and is manufactured in 14, 15, 17, 18 and 20 foot lengths. The smallest model has a beam of 80 inches, the largest model has a beam of 96 inches. It is this width in proportion to length that gives the craft the stability. Only because of the patented three-hulled design, is it possible to build the boat so wide without loss of rigidity.

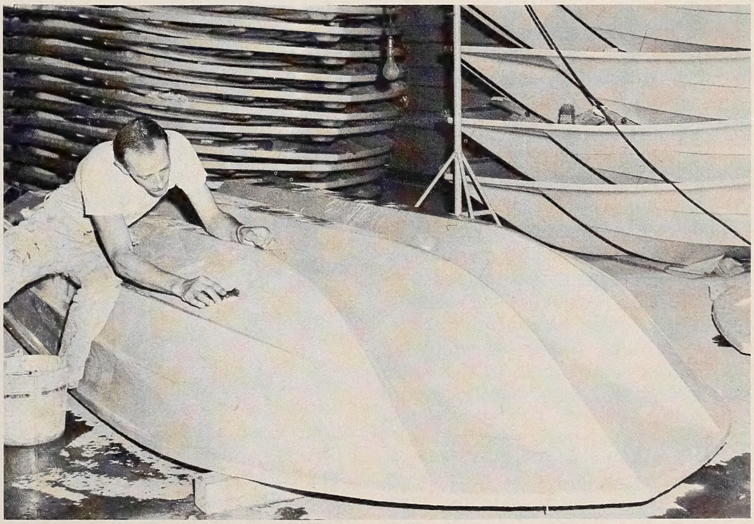
The boats are made from laminations of fiberglass cloth laid up by hand in polished moulds and bonded together with a coloured resin adhesive. After the shell of the boat has hardened, it is forced from the mould by the pressure of water pumped through special openings. All hulls are carefully checked for minute flaws or air bubbles which are filled before final polishing.

The deck section of the boat is moulded separately and then bonded onto the hull section. "Naugahide" upholstered seats manufactured in Edmonton by Canadian Bedding Ltd. are added along with "Glide Ride" steering, bow and stern lights and other hardware as the boats move along the production line.

The boats, which come in five different colours, are sold through dealers. They come completely equipped except for the motor, and are sold only in western Canada because the supply cannot keep up with the demand. Owner John Booth is looking for larger quarters.

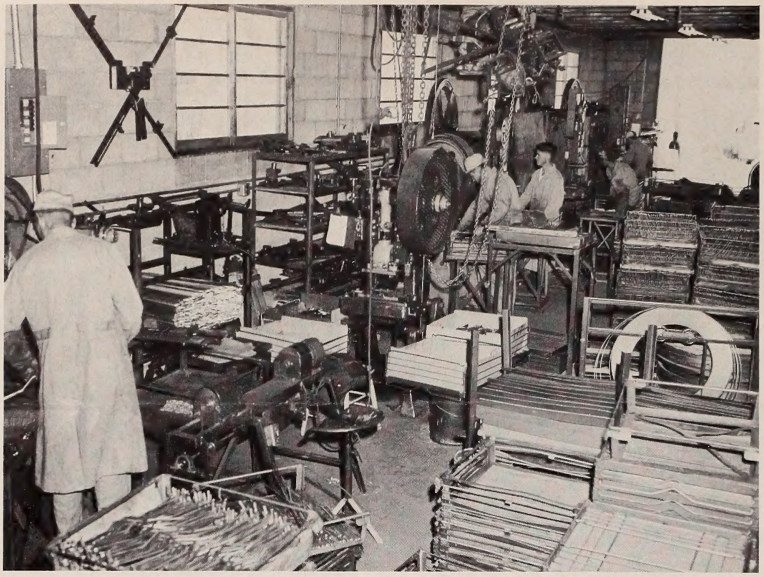
Besides the "Power Cat" line, the company also builds sailboats of several types, including the "Flying Dutchman", a 20 foot centreboard dinghy with an imported fiberglass hull; the "Canadian Y Flyer", an 18 foot wooden sailing scow with a fiberglassed exterior; and the "National Enterprise", a 14 foot wooden sailing dinghy with a fiberglassed exterior, which is said to be the second most popular type of sailboat in the world.

With an annual payroll of over $40,000, eight employees, and $20,000 worth of equipment in its 7,000 square foot building, the company is hoping to raise its production of 60 boats a year to over 300 boats as soon as it is relocated in a larger building.



The boats are hand rubbed and carefully checked before final polishing.

Folding Trays Widely Used



The various parts for the trays are shaped, bent and threaded on this line of machines before passing through the welding and assembly sections.

Drader Manufacturing Ltd., of Box 35A, R.R. 2, South Edmonton, owes its present prosperity to the sales success of an ingenious patented folding bread tray for use by bakeries in handling and shipping their product. The metal tray holds ten loaves of bread and prevents any damage to the loaves during handling or stacking. When the bread has been removed, the sides of the trays fold down flat on the bottom, demanding very little storage or shipping space.

Modified versions of the tray are now also being produced for use by dairies as a milk delivery carrier, and by fruit and vegetable wholesalers as a produce box. The produce box is modified to permit the side of the box to be opened and the produce removed even when it is in the lower part of the stack. This permits boxes of different vegetables to be stored in the same stack and still be all easily accessible.

The original bread tray was so well received that it is now being used all over North America and also in the United Kingdom, and enquiries have been received from as far afield as Japan. The trays are sold in Canada by Lister Agencies of Vancouver and in the U.S.A. by Del-Tray Co. of Oakland, California, the American franchisee and manufacturer. The trays are manufactured in England by Burgess Engineering of Stoke on Trent.

The Edmonton plant and offices of the company are housed in its own 5,200 square foot, $35,000 concrete block building and has $50,000 worth of equipment including several large presses, rolling machines and standard machine shop equipment such as lathes and shapers. After the company was incorporated in its present form in 1960 by C. H. Drader, the owner and inventor of the tray, several of the required presses and rolling mills were built by the company in its own machine shop as they could not be readily procured elsewhere. The trays are mass produced from locally procured stock steel and iron and all manufacturing, assembly and finishing operations, with the exception of the painting and/or chrome plating, are done on the premises. The painting and plating operations are contracted out. A total of $80,000 annually is paid in salaries and wages to the company's 26 employees.

Research Council of Alberta

Industry Assisted With Production Problems

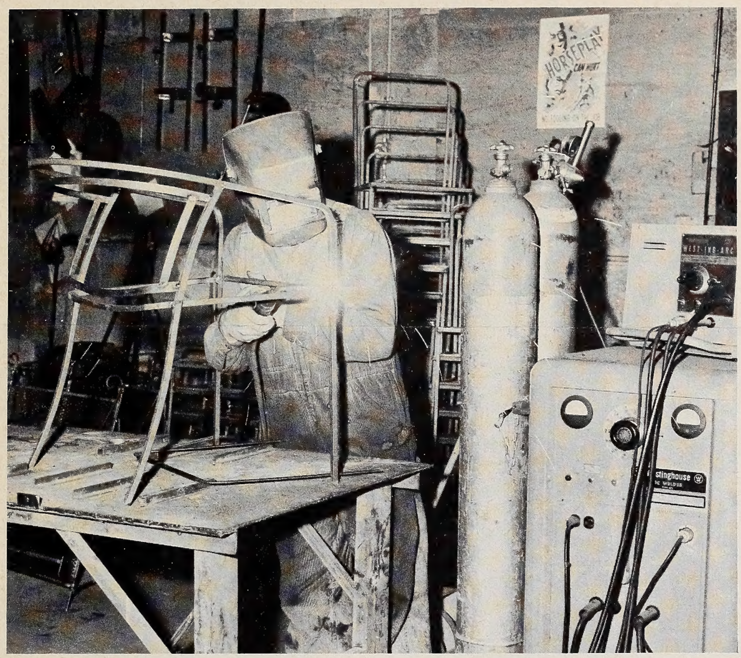
Technical Information Service of the Research Council of Alberta has expanded its program to offer industry assistance with production problems as well as with technical problems. An industrial engineer diagnoses and makes recommendations on production planning, materials handling, cost reduction, plant layout, personnel administration, etc. Inquiries on this free service may be directed to Mr. J. N. Ergil, Research Council of Alberta, 87th Avenue and 114th Street, Edmonton.

The following publications on Productivity prepared by Technical Information Service, National Research Council, are available at no cost from the Research Council of Alberta:

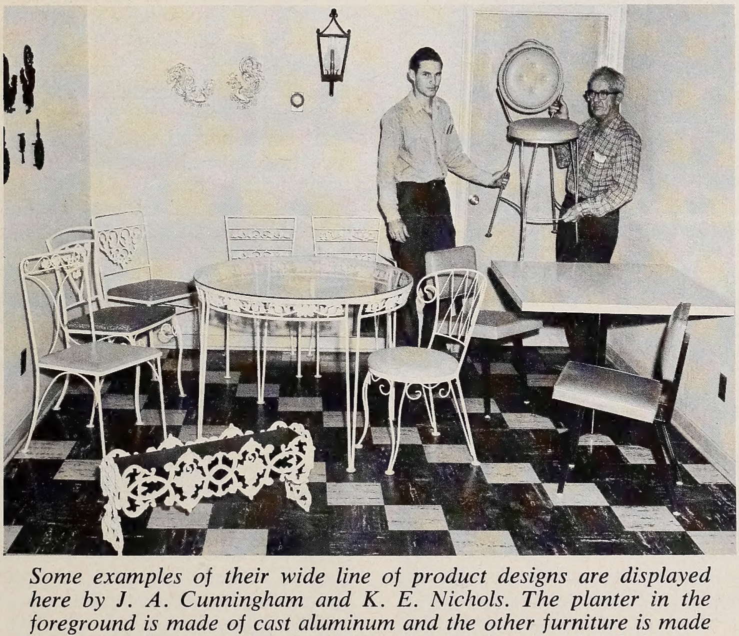
1. T.I.S. Report No. 58, Wage Incentives, A Literature Survey
2. T.I.S. Report No. 66, Industrial Productivity
3. T.I.S. Misc. Report No. 9, Work Study in the United Kingdom
4. T.I.S. Misc. Report No. 11, Industrial Productivity
5. Information Note No. 72-59, Lighting and Color in Factories
6. Information Note No. 78-59, Method Study and Productivity

The trays at work. Their convenience, safe stacking and easy handling are all well displayed in use at this Edmonton bakery.

Many Types of Metal Furniture Manufactured by Edmonton Firm



This inert atmosphere welding machine gives a much smoother welded joint with no scaling or rough surfaces.



A 6,000 square foot concrete block building at 14740 - 115 Ave., Edmonton, leased by D. K. Ornametal Ltd. houses their offices, showroom, factory and $20,000 worth of equipment, including a 2400 degree furnace for melting aluminum and an inert atmosphere gas welder which leaves no scale or oxidation.

A wide range of products including wrought iron, tubular steel and cast aluminum furniture are manufactured by the company. Apart from standard lines of furniture, they also specialize in volume production of custom designed furniture and fittings for hotels, hospitals, schools and businesses. Their designs range from the slim functional lines of ultra-modern office furniture to the ornamental arabesques and curliques of Victorian and Renaissance styled French and Italian furniture. The latter are usually executed in cast aluminum, thus combining the grace of the original cast iron designs with the lightness and rust-proof features of modern materials.

The raw materials used by the company are procured from various sources, including steel from Premier Steel Mills Ltd. and Wilkinson Ltd., upholstering materials from La France Textiles and George N. Jackson, and scrap aluminum from local dealers.

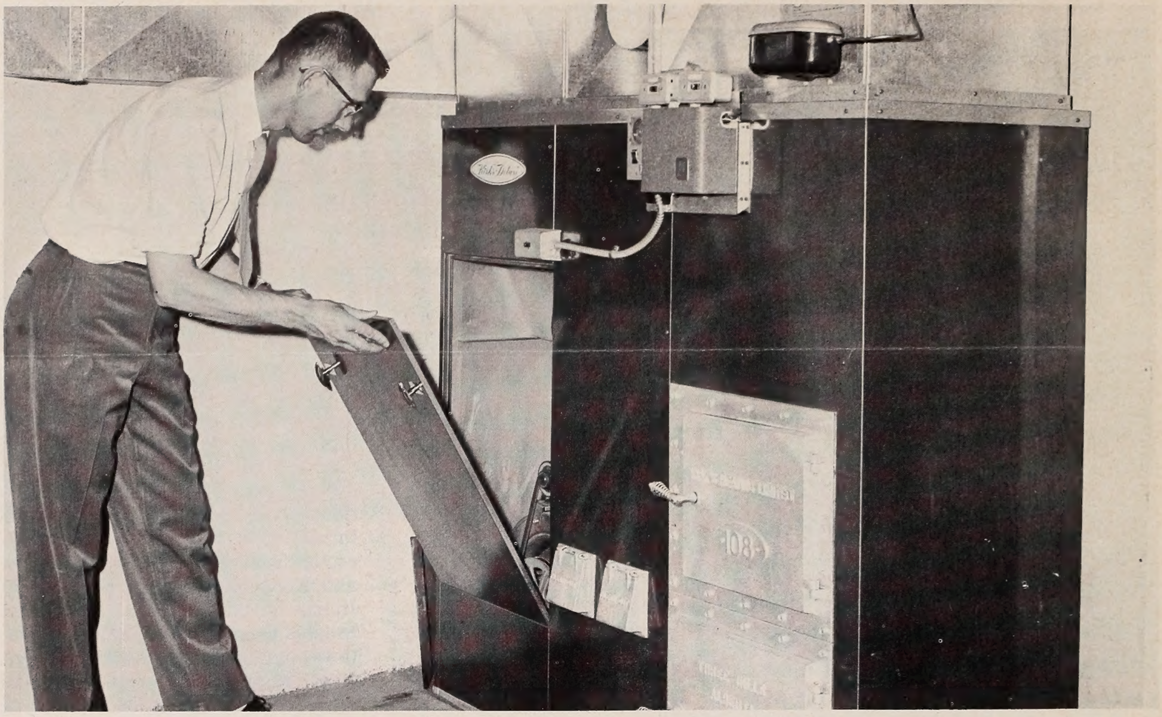
Cutting, bending, shaping and welding are all done on a mass production basis. The company also maintains a wide selection of patterns for the production of sand moulds for its aluminum casting operations. Another section of the plant contains the upholstering shop where the firm can do its own upholstering to a wide range of specifications.

With 9 employees and a $32,000 annual payroll, the company is managed by K. E. Nichols and J. A. Cunningham, who are also part owners of the business, along with G. Thompson and F. T. Atkin.

Some examples of their wide line of product designs are displayed here by J. A. Cunningham and K. E. Nichols. The planter in the foreground is made of cast aluminum and the other furniture is made from wrought iron or tubular steel with various types of upholstering and surface finishes.

Authorized as second class mail at the Post Office Department, Ottawa, Ont., and for payment of postage.

Demand for Coal Fired Furnaces Brings New Combustion Techniques



This newly installed coal fired commercial sized furnace shows the easy access and clean lines of the modern style coal furnace.

A reputation for trouble-free performance and good service has enabled an Alberta manufacturer of coal-fired automatic stoker furnaces to expand sales and production in a province where the overwhelming trend for many years has been toward other fuels. By constantly improving design, Kirk's Heating Ltd. of Three Hills have developed a complete line of modern coal-fired furnaces with pleasing appearance and cleanliness. In smaller towns where natural gas is costly Kirk's are still keeping a percentage of the heating market for coal. Their success is indicated by the 60% increase in coal-fired furnace sales in 1962 and their sales goal of $800,000 in 1963.

Most recently Kirk's have added new products to diversify their line of manufacture. Among these are steel lockers for schools, cartop carriers, and metal packing cases and trunks for overseas shipping.

Increased sales have given rise to increased space requirements and the company is now installing equipment in the new 7,200 square foot Butler building it has just erected, bringing its total factory, warehouse and office space to 27,000 square feet with a total value of $60,000. The buildings house $30,000 worth of equipment and the company also maintains a $20,000 fleet of 25 trucks manned by installation experts who travel to all parts of the province. The new building is laid out for modern assembly line sheet metal fabrication and is planned to allow for increased product diversification.

Originally founded in 1930, the company is now owned by Roger Kirk, president, vice-president Frank Woods, and Murray Kirk, company treasurer. General manager for the past ten years is George Reed.

The firm's complete line of coal-fired furnaces in several different sizes embody a number of improvements over the older type of coal furnace. These include specific design for a forced-air heating system, an improved stoker and coal feed system, and the ability to use coal more efficiently. This latter feature results from a redesigned combustion chamber and a double radiator in the heat exchanger which reduces the temperature of flue gases from 1,000 degrees F. to 500 degrees F., providing more heat for circulation and decreasing fuel requirements. The automatic stoker is available separately as a conversion unit for other types of furnaces.

The company's raw materials are procured from Canadian steel suppliers and with 45 employees, the annual payroll is $200,000.

Kirk's Heating Limited's products are sold throughout western Canada. Their furnaces are sold completely installed in Alberta and sold completely equipped elsewhere. They anticipate exporting to the United States.

Alberta Peat Moss Cuts Water Bills for California Growers

The dwindling supplies of peat moss from previous sources outside the province has spurred the development of a new industry in Alberta. Noralta Peat Moss Products Ltd. was formed in 1963 to develop the extensive peat moss beds located at Alpen, about 75 miles north of Edmonton, where the company has leased 1,600 acres of land from the provincial government and built a processing plant. The company's mailing address is P.O. Box 6268, Station "C", Edmonton.

The deposits contain a particularly clean type of sphagnum peat moss with highly desirable properties including high water retention and fibrous structure, and a minimum content of dirt, dust and other undesirable materials.

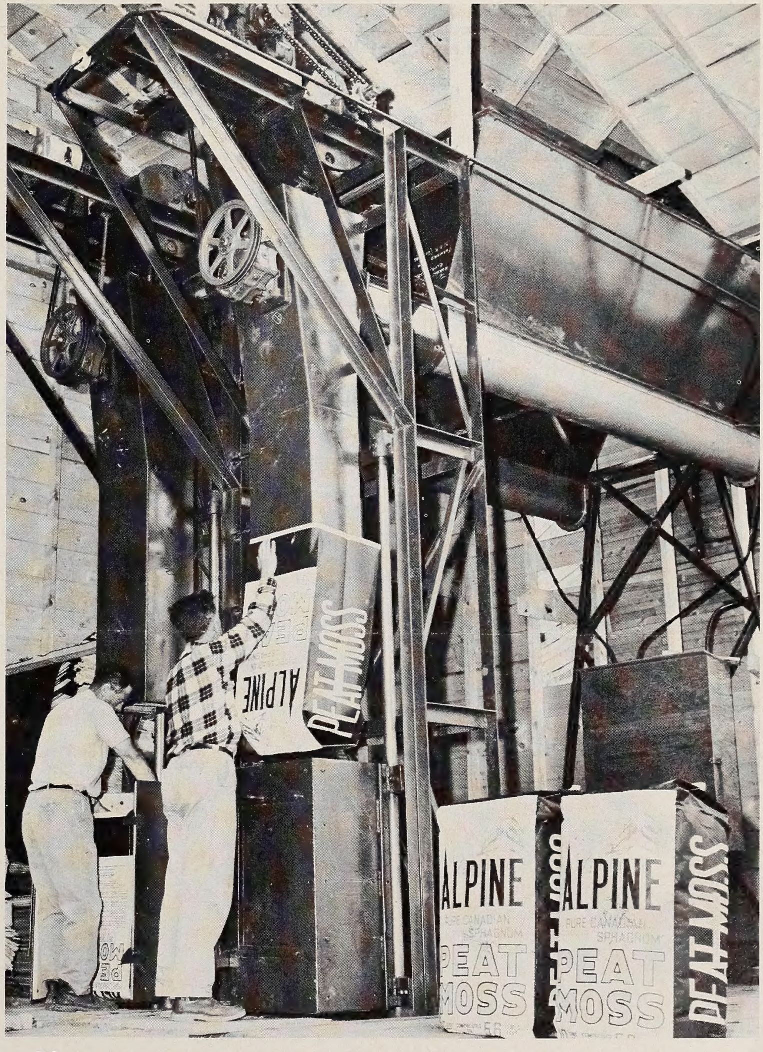
After the thin overburden and native bush are bulldozed away the moss is gathered to a central point by a "slusher" bucket pulled by a steel cable with a 500 foot working radius. Trucks move the moss to the plant where it passes through an hydraulic press to remove a large amount of its moisture. A continuous feed conveyor moves the moss through a rotary dryer to remove most of the remaining moisture. The dryer is heated by a coal fired furnace utilizing locally mined coal.

After passing through an air separator to remove sticks, stones and other unwanted materials, the now fluffy peat moss is blown through a 300 foot pipe to the 30 foot high storage silo which is built from laminated two by fours. Two bagging machines alongside the silo can fill 50 bags an hour and pack 10 cubic feet of peat moss into the 5.6 cubic foot bags. The special polythene lined bags are supplied by Bonar and Bemis.

With the exception of the bagging machine, almost all the equipment in the plant has been developed by the owners, partners M. L. Bosse, J. A. Willcox and E. R. Goodwin. Total value of machinery and equipment is $60,000. The partners are planning to erect a 2,400 square foot building over the equipment at an additional cost of over $5,000.

All of the firm's current production will be sold on the west coast of the United States, where the partners have a contract to supply $1 million worth of their product a year to American Modoc Inc., of California. Initial assistance in locating a distributor in the United States was given by the Los Angeles offices of the Alberta Department of Industry and Development, and the Federal Trade Commissioner. Large consumers of the peat moss in California are market gardeners who find its use helps save them money on irrigation water. Such water would otherwise cost them $1,000 per acre.

With a monthly payroll of $1,500 for six employees, Noralta Peat Moss Products Ltd. expects to see these figures rise as the demand for Alberta's high grade sphagnum peat moss increases.



These twin bagging machines have an output of 50 bags an hour and pack 10 cubic feet of peat moss into the 5.6 cubic foot bags.

TOWN OF BOW ISLAND

LOCATION:

Section 35-10-11-W4 in Census Division No. 1. This location is 58 miles east of Lethbridge and 38 miles west of Medicine Hat on Highway No. 3 and on the Canadian Pacific Railway branch line from Medicine Hat to Lethbridge.

ALTITUDE:

2,621 feet.

TEMPERATURE:

Average summer, 66.4 degrees F., average winter, 16.1 degrees F., average annual, 42.2 degrees F.

RAINFALL:

Average annual rainfall 9.39 inches, average annual snowfall, 41.6 inches, average annual precipitation, 13.55 inches. (Note—rainfall and temperature figures taken from weather station at Medicine Hat.)

GEOLOGY:

The Belly River formation is bedrock at Bow Island. This formation is a series of sandy shales with occasional sandstone beds, and is also a coal bearing horizon.

SOIL:

Bow Island is in the brown soil zone.

LIVING CONDITIONS:

Bow Island is the educational and shopping centre for a large farming area and has all modern amenities.

ADMINISTRATION:

The town is governed by a mayor elected for a two year term and six councillors, two elected each year for a three year term. The secretary-treasurer and superintendent administer the affairs of the town in accordance with the policies set by the council.

LAW ENFORCEMENT:

The town has one police constable and one resident R.C.M.P. constable. Building plans must be approved by the council and must conform to provincial electrical, gas and sanitary regulations.

FIRE PROTECTION:

The fire brigade consists of one chief and 14 volunteer firemen and the town is well provided with fire hydrants and modern fire fighting equipment.

TAX STRUCTURE:

The total assessment is $1,516,220 based on a total mill rate of 40.0.

UTILITIES:

Power is three phase, 60 cycle supplied under a franchise by Calgary Power Ltd. Natural gas is purchased in bulk by the town and distributed through its own system. Water is obtained from the St. Mary-Milk River Irrigation Development project and passes through a fully modern treatment plant. L.P. gas and diesel fuel are also available but no coal is used in the town.

HEALTH SERVICES:

The Bow Island Municipal Hospital No. 72 has 20 beds and 8 bassinets. The town has three doctors and one drug store.

FINANCIAL FACILITIES:

Bank of Montreal, Provincial Treasury Branch.

EDUCATION:

The Bow Island school District No. 1883 is a unit of Forty Mile County No. 8. Grades 1 to 12 are taught along with the following optional subjects: Industrial Art, Typing, Music, Business Education, Oral French, Home Economics and Shop. The Bow Island Roman Catholic School District No. 82 is an independent district. Grades 1 to 11 are taught along with the following optional subjects: Music, Art and Drama.

LOCAL RESOURCES:

Wheat is the principal crop grown in the district, but with the development of irrigation there is a trend towards the production of vegetables such as beans, sugar beets, corn and onions. The farming area to the west and south west of town derives 85% of its cash income from wheat, the highest of any district in the province. Cattle account for two thirds of the total cash income in the areas to the east and south east of town.

BUILDING SITES:

Industrial and residential property can be purchased from the town or private owners at reasonable prices.

For further information about Bow Island write

Mr. David Ellingson,
Secretary Treasurer
Town of Bow Island
Bow Island, Alberta

or

R. MARTLAND
Director of Industrial Development
Department of Industry and Development
335, Highways Building
Edmonton, Alberta.